fails to respond to Prof. Schwartz's point that if the double marginalization concern were valid, it would apply with equal or greater force to benefits that could be realized from allowing long distance carriers to integrate vertically into local markets. Schwartz Supp. Aff. ¶¶ 66-67.

- In responding to Prof. Schwartz's key observation that an increase in BOCs' market share in long distance services could be achieved largely by diverting existing output and revenue away from IXCs rather than expanding industry output, Schwartz Supp. Aff. ¶ 74, Prof. Hausman mistakenly accuses Prof. Schwartz of trying to protect IXC's profits rather than consumer welfare.[14] He overlooks the very next sentence of Prof. Schwartz's analysis, in which Prof. Schwartz explained the relevance of his observation about diversion -- that, contrary to Prof. Hausman's claims, a BOC's substantial increase in long distance revenues "need not hinge on reducing industry price significantly; and hence a BOC may not have strong incentives to cut interLATA prices." Schwartz Supp. Aff. ¶ 74. This conclusion obviously goes directly to the issue of consumer welfare effects from BOC long distance entry.

- Though Prof. Hausman claims, in his long distance price analysis, to have averaged price differences over different customers' usage patterns,[15] it appears that he did so only by numbers of customers in each class, not by calling volume or revenues, which would

[14] Hausman South Carolina Reply Decl. ¶ 37.

[15] Hausman South Carolina Reply Decl. ¶¶ 38 n.26, 39.

greatly skew the results in light of the well-recognized large disparity between revenues and customer numbers.

- Prof. Hausman simply declares that BOCs will not have competitive advantages over IXCs in bundled services because competitors would also have the ability to bundle.[16] But the parity that Prof. Hausman casually assumes, in this and other respects, will not in fact exist until local markets have been fully and irreversibly opened to competition, e.g., through the establishment of nondiscriminatory wholesale support systems scaleable to meet competitive demand for resale and unbundled network elements, and procompetitive pricing of the local services and facilities that competitors must purchase from the BOC.

Prof. Hausman's attempted reliance on comparisons with telecommunications markets in the United Kingdom and Canada to support his claims is similarly unjustified:

- Competition in the United Kingdom. In complaining that Prof. Schwartz and others have not addressed evidence from the United Kingdom telecommunications markets about the development of local competition,[17] Prof. Hausman himself fails to present an accurate picture of developments in U.K. telecommunications markets and the special circumstances underlying them. Prof. Hausman's argument that full compliance with the requirements of section 271 is not needed because local competitors have attained a collective 7% local market share in the U.K. without unbundling of network

[16] Hausman South Carolina Reply Decl. ¶ 11.

[17] Hausman South Carolina Reply Decl. ¶ 35 n.22.

elements fails to appreciate several significant differences between the U.K. and the U.S. In the U.K., local competition was authorized nationwide over six years ago. The Telecommunications Act has been in effect in the U.S. only since February 1996, less than two years as of this filing, and there is no basis yet for evaluating the efficacy of the U.S. and U.K. approaches to local competition over a comparable time period of sufficient duration. The primary local competitors in the U.K. have been facilities-based cable companies that built out two-wire networks from the start for both cable and telephony services (unlike the one-wire U.S. cable systems constructed earlier), so that they did not have to incur additional expenses to rewire their networks for telephony (unlike U.S. cable companies).[18] Moreover, after six years of local competition, BT still retains substantial market power in local as well as domestic long distance services in the UK, as the Department has recently found.[19] The relevant point is not whether the U.K. has been able to achieve some degree of local competition relying exclusively on buildout of separate facilities -- an option primarily undertaken through the simultaneous initial installation of two wires by cable systems in the U.K, which is not possible for the already existing U.S. cable systems -- but rather whether the U.S. model, with its three entry

[18] Moreover, in the U.K. development of competition has been overseen by a single regulatory authority with comprehensive nationwide jurisdiction, in contrast with the U.S., where the resolution of fundamental issues of implementation, which is still underway, has taken place in the context of a far more complex federal system.

[19] United States v. MCI Communications Corp and BT Forty Eight Company, Civil Action No. 94-1317 (TFH), Memorandum of the United States in Support of Modification of the Final Judgment, at 5-6 (D.D.C. filed July 7, 1997).

paths, ultimately succeeds in bringing about a still more competitive local market. There is no basic disagreement in policy between the U.S. and the U.K. on the benefits of opening both local and long distance telephony markets, notwithstanding differences in the roads taken to reach that goal. In this regard, Prof. Hausman overlooks findings of the British regulator OFTEL concerning price trends in the U.K. before and after local competition began to develop,[20] which tends to bear out Prof. Schwartz's observation that competition in both local and long distance markets will better serve consumers than allowing vertical integration by a single carrier that retains a local monopoly. Schwartz Supp. Aff. ¶ 12. The U.K. authorities also reached the same conclusion in 1991, after several years of experience with a long distance duopoly and no local competition.[21]

- Competition in Canada. Prof. Hausman also cites as evidence of the benefits to be

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[20] Substantial prices decreases have occurred for many services in local markets in the U.K. between 1991 and 1996, after local competition began to emerge, and the weighted average of BT's local and long distance prices overall has been going down over the period since local competition began, whereas before such local competition existed in 1984-1991 and BT faced competition only in long distance markets, BT's weighted average of price changes as an integrated provider of services in local and long distance markets was increasing. OFTEL, Pricing of Telecommunications Services from 1997, Annexes to the Consultative Documents, Issued by the Director General of Telecommunications, Annex B, Trends in prices and quality of service, at 6, Table B2(a), attached to this Evaluation as Exhibit 8 (showing net cumulative increase in weighted average of BT local and long distance prices of +14.2% between 1984, when long distance competition began, and 1991, when the U.K. changed its duopoly policy and began authorizing local competition by cable providers, and net cumulative decrease in weighted average of BT local and long distance prices of -15.4% between 1991 and 1996).

[21] Department of Trade and Industry, Competition and Choice: Telecommunications Policy for the 1990s, at iii-iv (Mar. 1991) (concluding that the opening of all telecommunications markets in the U.K. to competition would lead to more choice of services, a wider range of services, and a more rapid decline in prices than would have otherwise occurred).

realized from vertical integration of BOCs into long distance certain prices available from vertically integrated long distance carriers in Canada,[22] but in fact the prices he relies on are no lower than the best prices already widely available in the United States from various non-integrated long distance providers that Prof. Schwartz has identified,[23] and are also similar to the average revenue received on a domestic U.S. long distance minute.[24]

[22] Hausman Louisiana Decl. ¶ 27; Hausman South Carolina Reply Decl. ¶ 35.

[23] Compare the long distance prices, in US dollar equivalents, that Prof. Hausman cites of 12.2 cents per minute for BC Tel in British Columbia, and 10-11.5 cents per minute for Telus in Alberta, Hausman Louisiana Decl. ¶ 27, to the rates that can already be obtained in the U.S. under various pricing plans of 12 cents per minute from MCI, 10 cents from AT&T and Sprint, and 9 cents per minute from LCI. Schwartz Supp. Aff. ¶ 85 n.38. Prof. Hausman's limited comparisons of a few Canadian carriers' rates with those of U.S. carriers under some pricing plans and periods cannot yield any supportable conclusions as to the relative overall competitiveness of U.S. and Canadian long distance markets.

[24] In 1996, average billed revenue per interstate direct dialed domestic minute in the U.S. was 11.57 cents, inclusive of access charges. Federal Communications Commission, Telecommunications Industry Revenue: TRS Fund Worksheet Data at Figure 5 (Nov. 1997).

EXHIBIT 5

Georgia Public Service Commission, Order Establishing Cost-Based Rates, In re: Review of Cost Studies, Methodologies, and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services, Docket No. 7061-U (Oct. 21, 1997)

RECEIVED
... FLANNAGAN
... E DIRECTOR
... M. LYNDALL
EXECUTIVE SECRETARY

Georgia Public Service Commission

244 WASHINGTON STREET S W
ATLANTA, GEORGIA 30334-5701
(404) 656-4501 OR 1 (800) 282-5813

... 6 1997
EXECUTIVE SECRETARY
G.P.S.C.

Docket No. 7061-U

ORDER ESTABLISHING COST-BASED RATES

In re: Review of Cost Studies, Methodologies, and Cost-Based Rates for Interconnection and Unbundling of BellSouth Telecommunications Services

Record Submitted: September 19, 1997 Date Decided: October 21, 1997

APPEARANCES

On behalf of the Georgia Public Service Commission:
Tiane L. Sommer, Counsel for Commission Adversary Staff
Nancy G. Gibson, Counsel for Commission Adversary Staff
Stacey Ferris-Smith, Counsel for Commission Advisory Staff

On behalf of AirTouch Cellular:
Charles V. Gerkin

On behalf of American Communications Services, Inc.:
William E. Rice

On behalf of AT&T Communications of the Southern States, Inc.:
Jim Lamoureux & Ken McNeely
Tom Lemmer, Kevin Dwyer, & Jeff Miller
Laureen Seeger

On behalf of BellSouth Telecommunications, Inc.:
Fred McCallum, William J. Ellenberg,
Doug Lackey, Bennett Ross, & Mike Twomey

On behalf of the Cable Television Association of Georgia

James Comerford

On behalf of the Consumers' Utility Counsel:

Jim Hurt, Kennard B. Woods, John Maclean, & Tammy Stanley

On behalf of Georgia Public Communications Ass'n. Inc. & AT&T Wireless PCS, Inc.:

Dean Fuchs

On behalf of the Georgia Telephone Association:

John Silk

On behalf of KMC Telecom, Inc.:

Charles A. Hudak

On behalf of Low Tech Designs, Inc.:

James M. Tennant, President

On behalf of MCI Telecommunications Corp.:

David Adelman, Mickey Henry, & Martha McMillin

On behalf of Media One:

L. Craig Dowdy

On behalf of MFS Communications Co.:

Richard M. Rindler

On behalf of MGC Communications, Inc.:

Peyton Hawes & Kim Dymecki

On behalf of Sprint Communications Co., L.P.:

William R. Atkinson

On behalf of the United States Department of the Army:

Sheryl Butler

On behalf of WorldCom, Inc.:

John M. Stuckey

BY THE COMMISSION:

The Georgia Public Service Commission ("Commission") opened this proceeding in order to review cost studies and methodologies and establish cost-based rates applicable to BellSouth Telecommunications, Inc.'s ("BellSouth") interconnection and unbundling including the unbundled network elements, nonrecurring charges, collocation, and access to poles, ducts, conduits and rights-of-way. The setting of these rates concludes a substantial leg of the journey toward full competition in the telecommunications marketplace in Georgia. The Commission's stated goals were to adopt a preferred methodology, approve a cost study or set of cost studies, and determine the resulting cost-based rates for interconnection with and the unbundling of BellSouth's telecommunications services, pursuant to the federal Telecommunications Act of 1996 ("1996 Act"), especially Sections 251 and 252, and the Georgia Telecommunications and Competition Development Act of 1995 ("Georgia Act"), O.C.G.A. § 46-5-160 *et seq*. The Commission's review herein will enable the Commission to meet its responsibilities under both Acts.

In summary, the Commission has adopted the use of BellSouth's cost studies with specific adjustments. These adjustments include a lower cost of capital, lower depreciation rates, slightly higher fill factors, a corrected loop sample, and moving certain shared costs from nonrecurring charges to recurring rates. The adjustments result in a 2-wire analog unbundled loop recurring (monthly) rate of $16.51. The nonrecurring charge associated with the 2-wire analog loop is $42.54.[1] The Commission does not adopt BellSouth's proposed Residual Recovery Requirement. The Commission also determines that all features associated with the switch should be included with the unbundled switch port element.

As to collocation, the Commission adopts charges for the space preparation portion of the amounts charged to CLECs that are specified at $100 per square foot, with a minimum 100-square foot space that a CLEC may order. Additional space may be ordered in 50-square foot increments. All other rates contained in the BellSouth "Collocation Handbook" are adopted. However, the CLEC will be allowed to elect wire mesh cage construction as an alternative to gypsum (plywood), with no change in the cost.

The remaining findings, conclusions and adjustments are detailed in this Order. These include adopting the FCC formula for computing pole rental (currently at a rate of $4.20); revising the pricing structure for OSS electronic interface cost recovery to remove per-order charges; remaining with geographically averaged rates at this time; and reaffirming the Commission's previous decision in the arbitration proceedings that recombination of the loop and port elements to replicate BellSouth retail services shall be priced and treated as resale under the federal Telecommunications Act of 1996 ("1996 Act").

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[1] As discussed later in this Order, the Commission did not adopt a separate disconnection charge of $11.00 that would have been payable if and when the CLEC asks for disconnection of the loop.

TABLE OF CONTENTS

I. INTRODUCTION

A. Introductory Summary

The Commission stated in its initial Procedural and Scheduling Order that the Commission sought to determine appropriate methodologies and cost studies, and the resulting cost-based rate amounts, for certain items. Following is that list of items, including a summary of the Commission's determination as to each item. Further detail is contained in the following sections of this Order.

1) The minimum set of unbundled network elements required to be offered on a non-discriminatory basis.

The Commission adopts a forward-looking approach for unbundled network element ("UNE") prices that recognizes BellSouth's existing network configuration and recalculates the associated costs using forward-looking technology. Consistent with this approach, the Commission does not allow BellSouth's proposed Residual Recovery Requirement ("RRR") because the RRR would cause the essentially forward-looking prices to revert back to historical, embedded-cost prices that are conceptually the same as rate of return or rate-based prices. The Commission also adopts specific adjustments to certain assumptions that BellSouth utilized, including cost of capital, depreciation, fill factors, shared costs for direct labor rates, and the loop sample used for BellSouth's cost study.

For non-recurring charges, the Commission adopts an adjustment to remove BellSouth's assumed shared cost associated with direct labor rates. The Commission also adopts a rate design change to remove the disconnection charges from the non-recurring service order charges. Finally, as discussed below, the per-order charges should not include cost recovery for the development of electronic interfaces to operational support systems ("OSS"). The Commission adopts a rate design for OSS cost recovery that includes volume discounts which should promote the usage of BellSouth's newly developed electronic interfaces. The Commission will also direct BellSouth to file for the Commission's review further information about the OSS costs, once BellSouth has implemented the long-term electronic interfaces that were scheduled by December, 1997.

2) The provision of access to such unbundled network elements.

The Commission establishes herein the prices all BellSouth's unbundled network elements. As a part of this, the Commission determines that switch vertical features should not be priced as individual elements but incorporated within the unbundled switch port element. This can be viewed as an aspect of UNE rate design; the port element should be available at one price that includes all the switch features.

3) Compensation for transport and termination of local telecommunications traffic.

The Commission establishes the rates for compensation for transport and termination of local telecommunications traffic, as a function of the BellSouth cost study pursuant to the adjustments the Commission has adopted. As to the rate design for compensation for transport and termination of local traffic, the Commission affirms the pricing policy it established in the MCI-BellSouth arbitration (Docket No. 6865-U).

4) **Physical and virtual collocation.**

Collocation occurs when a CLEC shares space with BellSouth in order to provide its services. For physical collocation rates, the Commission provides for the development of specified rates including those for space preparation, rather than the unspecified "individual case basis" ("ICB") approach that BellSouth submitted. The CLEC shall also be able to elect wire mesh cage construction as an alternative to gypsum (plywood).

5) **The treatment of joint and common costs, including common costs that cannot be attributed directly to individual elements (*see* FCC rule, 47 C.F.R. Section 51.505).**

As mentioned above, the Commission adopts an adjustment to remove BellSouth's assumed shared cost associated with direct labor rates within the non-recurring charges. This cost is then added back in a manner that slightly increases the recurring charges.

6) **Any deaveraging, such as geographic deaveraging, that parties may propose.**

The Commission does not adopt any geographic deaveraging at this time of the rates in this proceeding. Deaveraging of the cost-based rates should instead be determined in connection with universal service and/or Universal Access Fund considerations.

7) **Any other aspect(s) of interconnection with and unbundling of BellSouth's telecommunications services.**

The Commission adopts pole rental rates that reflect the FCC's current formula, under the category of access to poles, ducts, conduits and rights-of-way.

For OSS cost recovery, the Commission adopts a rate design different than proposed by BellSouth that will be more conducive to competition. This includes removal of OSS charges within the per-order service (non-recurring) charge, in order to avoid "chilling" the placing of orders, and adopting a rate design with volume discounts.

B. Jurisdiction

The 1996 Act includes at Sections 251 and 252(d) certain pricing standards and other requirements relating to interconnection and access to unbundled elements. Section 251(c)(3) provides, with respect to access to unbundled network elements such as unbundled loops, that each incumbent local exchange carrier ("ILEC") has the duty:

> to provide . . . nondiscriminatory access to network elements on an unbundled basis . . . on rates, terms, and conditions that are just,

> reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 . . .

Section 252(d) contains pricing standards for interconnection and network element charges, and for charges for transport and termination of traffic. The former must be based upon the cost of providing the interconnection or network element. The latter must provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; and the terms and conditions must determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls. These pricing standards, including rules of construction, are contained in Section 252(d)(1) and (2). Section 252(d)(1) provides the following pricing standard for the rates:

> Determinations by a State commission of the just and reasonable rate for the interconnection of facilities and equipment for the purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section --
> (A) shall be -
> (i) based on the cost (determined without reference to the rate-of-return or other rate-based proceeding) of providing the . . . network element . . ., and
> (ii) nondiscriminatory, and
> (B) may include a reasonable profit.

The cost-based rates established in this docket will provide closure to the interim rates set in the Commission's arbitrations under Section 252 of the 1996 Act.[2] The Commission recognizes that the

[2] The Commission stated in the early Section 252 arbitration dockets (e.g., MFS-BellSouth, Docket No. 6759-U; AT&T-BellSouth, Docket No. 6801-U), as it did in the state-law proceedings on MFS' and MCI's petitions about BellSouth's interconnection rates in Dockets No. 6415-U/6537-U, that the generic cost study proceeding established in this docket would be necessary in order for the Commission to establish permanent rates for unbundled loops and other aspects of interconnection and unbundled network elements. The 1996 Act provides that the Commission may direct parties to provide such information as may be necessary for the Commission to reach a decision on unresolved issues in an arbitration. Section 252(b)(4)(B). Similarly, the Georgia Act vests the Commission with authority to obtain information necessary to carry out its responsibilities. These provisions supported the Commission's proceedings in this docket.

The permanent rates established in this docket will also be used in many instances as the basis for true-up mechanisms associated with interim rates (e.g., in the MFS-BellSouth arbitration, Docket No. 6759-U; AT&T-BellSouth arbitration, Docket No. 6801-U; MCI-BellSouth arbitration, Docket No. 6865-U; and Sprint-BellSouth arbitration, Docket No. 6958-U; as well as many of BellSouth's negotiated interconnection agreements).

The Commission also noted in its proceeding involving BellSouth's Revised Statement of Generally rates established in this docket will also be applied to BellSouth's Revised Statement of Generally Availab[illegible] Terms and Conditions pursuant to the Commission's decision in Docket No. 7253-U.

In addition to its jurisdiction of this matter pursuant to Sections 251 and 252 of the federal Act, the Commission also has general authority and jurisdiction over the subject matter of this proceeding, conferred upon the Commission by Georgia's Telecommunications and Competition Development Act of 1995 (the "Georgia Act"), O.C.G.A. §§ 46-5-160 *et seq.*, and generally O.C.G.A. §§ 46-1-1 *et seq.*, 46-2-20, 46-2-21, and 46-2-23; and this proceeding shall be conducted in accordance with any relevant provisions of the Georgia Administrative Procedure Act, O.C.G.A. Ch. 13, Title 50, and the Rules and Regulations of the Commission, as such statutes and rules may be applicable to this proceeding.

The Georgia Act contains several provisions pertaining to interconnection and unbundling. All local exchange companies are required to permit reasonable interconnection with other certificated local exchange companies. This includes all or portions of such services as needed to provide local exchange services. The rates, terms, and conditions for such interconnection services shall not unreasonably discriminate between providers. O.C.G.A. § 46-5-164(a), (b). In the event that the parties cannot reach agreement through negotiation, the Commission shall determine the reasonable rates, terms, or conditions for the interconnection services. *Id.*, subsections (b), (c). Many interconnection agreements, especially between BellSouth and the smaller CLECs, already have been negotiated, filed with and approved by this Commission under the 1996 Act. In addition, four arbitrations have been conducted for larger CLECs, and BellSouth's proposed Statement of Generally Available Terms and Conditions in Docket No. 7253-U relied upon the interim rates subject to true-up according to the cost-based rates established in this docket. Those proceedings demonstrated that a full, generic review was necessary and invaluable in resolving the cost issues associated with interconnection and unbundling.

The Georgia Act provides further that interconnection services shall be provided for intrastate services on an unbundled basis similar to that required by the FCC for services under the FCC's jurisdiction. The Commission also has the authority to require local exchange companies to provide additional interconnection services and unbundling. O.C.G.A. § 46-5-164(d).

The Commission's jurisdiction under the Georgia Act includes the authority, among other matters, to establish reasonable rules and methodologies for performing cost allocations among the services provided by a telecommunications company. O.C.G.A. § 46-5-168(b)(9).[3]

Available Terms and Conditions (Docket No. 7253-U) that the established rates in this proceeding would provide the cost-based rates replacing the interim rates contained in that Revised Statement.

[3] The Georgia Act also imposes certain cost and price-related obligations on telecommunications companies that elect alternative regulation. These include prohibitions against cross-subsidy of nonregulated or alternatively regulated services with revenue created by regulated services, and against anticompetitive acts

Moreover, pursuant to O.C.G.A. § 46-2-20(a), the Commission has general supervision of all telephone companies. *See also* O.C.G.A. § 46-2-21(b)(4); *Camden Tel. & Tel. Co. v. City of St. Marys*, 247 Ga. 687, 279 S.E.2d 200 (1981); *City of Dawson v. Dawson Tel. Co.*, 137 Ga. 62, 72 S.E. 508 (1911). Pursuant to O.C.G.A. § 46-2-20(b), the Commission is also authorized to perform the duties imposed upon it of its own initiative.

The Commission has access to the books and records of telecommunications companies as may be necessary to ensure compliance with the provisions of the Georgia Act and with the Commission's rules and regulations, and to carry out its responsibilities under the Georgia Act. O.C.G.A. § 46-5-168(e). The Commission also has the general authority, pursuant to O.C.G.A. § 46-2-20(e), to examine the affairs of all companies under its supervision and to keep informed as to their general condition, their capitalization, and other matters, not only with respect to the adequacy, security, and accommodation afforded by their service to the public and their employees but also with reference to their compliance with all laws, orders of the Commission, and charter requirements. Pursuant to subsection (f) of that section, the Commission has the power and authority to examine all books, contracts, records, papers, and documents of any person subject to its supervision and to compel the production thereof.

C. FCC Rules and Eight Circuit Decision

The Commission recognizes that certain rulings and decisions at the federal level have some bearing upon this proceeding. The Federal Communications Commission ("FCC") issued its First Report and Order (Order No. 96-325, CC Docket No. 96-98) on August 8, 1996, adopting rules that were to become effective on September 30, 1996 ("First Report and Order"). However, a number of those rules especially as to pricing were vacated by the Eighth Circuit Court of Appeals.[4] The rules adopted by the FCC associated with its Report and Order remain in place except the following sections:

- Total Element Long Run Incremental Cost (TELRIC) pricing methodology, proxy prices for unbundled elements and other pricing rules (§§ 51.315(b-f), 51.501 through 51.515 (inclusive, except for Section 51.515(b) which the Court found to be a legitimate interim rate for interstate access charges), 51.601-51.611 (inclusive), 51.701-51.717 (inclusive, except for 51.701, 51.703, 51.709(b), 51.711(a)(1), 51.715(d), and 51.717, but only as they apply to Commercial Mobile Radio Service (CMRS) providers));

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or practices such as price squeezing, price discrimination, predatory pricing, or tying arrangements. O.C.G.A. § 46-5-169(4), (5).

[4] *See Iowa Utilities Board, et al. v. FCC*, No. 96-3321 (8th Cir., July 18, 1997), *and Iowa Utilities Board, et al. V. FCC*, Order on Petitions for Rehearing (8th Cir., Oct. 14, 1997)(vacating FCC Rule § 51.315(b-f)).

- The "pick and choose" rule (§ 51.809);
- The rural exemptions rule (§ 51.405);
- The FCC's authority under Section 208 to review and enforce agreements approved by state commissions (First Report and Order, ¶¶ 121-128);
- The rule requiring preexisting interconnection agreements that were negotiated before the enactment of the Act to be submitted for state commission approval (§ 51.303);
- The rule preempting any state policy that conflicts with an FCC regulation promulgated pursuant to Section 251 (First Report and Order ¶¶ 101-103, 180); and
- Portions of the FCC's unbundling rules (§§ 51.305(a)(4), 51.311(c), 51.315(c)-(f), and 51.317, and First Report and Order, ¶¶ 278, 281 (only to the extent that these provisions create a presumption that a network element must be unbundled if it is technically feasible to do so)).

The Court did not vacate the FCC Order in its entirety, and those portions of the FCC Order and rules that have not been vacated remain in force as valid regulations. In addition, the Eighth Circuit issued a subsequent Order on Petitions for Rehearing on October 14, 1997 clarifying its decision regarding the recombination or rebundling of unbundled network elements (which specifically vacated FCC Rule § 51.315(b-f)).

D. Statement of Proceedings

The Commission initiated this case in December 1996 in order to fully examine the costs for purposes of establishing rates associated with interconnection and unbundling of BellSouth's telecommunications services. BellSouth, AT&T and MCI submitted cost studies, and they and other parties submitted direct testimony, on April 30, 1997. Several prehearing conferences and workshops were conducted, and numerous data requests were served and answered by various parties. The Commission's Adversary Staff participated in the prehearing conferences and workshops and propounded several sets of data requests. Additionally, the parties were given the opportunity to conduct discovery depositions and availed themselves of that opportunity.

Supplemental, rebuttal, and surrebuttal testimony as well as revised and updated cost models and cost studies were subsequently submitted in this docket. The Commission conducted hearings September 15-19, 1997. All parties were given an opportunity to present testimony and cross-examine witnesses. Additionally, the prefiled testimony of several witnesses was admitted into evidence by stipulation of the parties. All the evidence of record and arguments have been reviewed and examined in detail.[5]

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[5] Certain documents and other information filed in this case were considered by the source of the information to be a "trade secret" under Georgia law, O.C.G.A. § 10-1-761(4), and were treated in conformance with the Rules of the Commission governing such information. *See* Rule 515-3-1-.11 Trade Secrets (containing rules for asserting trade secret status, filing both under seal and with public disclosure versions, use of protective agreements, petitioning for access, and procedures for challenging trade secret

II. UNBUNDLED NETWORK ELEMENTS

A. Cost Study Methodology and Major Assumptions

The Commission stated in its initial Procedural and Scheduling Order that it would presume that the cost study methodology should be forward-looking, consistent with the Total Element Long Run Incremental Cost ("TELRIC") approach previously approved by this Commission in Dockets No. 6415-U/6537-U.[6] Therefore BellSouth was required to submit its filing using a TELRIC methodology. The Commission also recognized and stated that BellSouth (or any other party) may also submit - and was free to advocate - a different set of cost studies using a methodology different from TELRIC. BellSouth chose to submit one cost study (with several revisions and updates) that it labeled as using a TELRIC methodology.[7]

The only other cost study model submitted in the docket was the Hatfield model sponsored by AT&T and MCI, also labeled as using a TELRIC methodology. The primary difference between the two cost models was that BellSouth assumed its existing network configuration, while the Hatfield model uses a "scorched node" approach that assumes existing central (end) offices but essentially rebuilds the network using fully forward-looking configurations and assumptions. The second most substantial difference between the BellSouth cost study and the Hatfield model was BellSouth's application of a "Residual Recovery Requirement" ("RRR") factor to the unbundled loop and unbundled port rates. These two substantial differences between BellSouth and the Hatfield approach are discussed in subsequent subsections.

Generally, BellSouth performed cost studies for the following unbundled network elements: (1) unbundled local loops; (2) sub-loop unbundling; (3) unbundled local and tandem switching capabilities and local interconnection; (4) unbundled transport (interoffice and local channels, including shared transport and dedicated interoffice facilities) and local interconnection; (5) signaling

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designations).

[6] *See* Order, December 6, 1996, Docket No. 7061-U, at 3 of 9.

[7] The Commission also required that any party submitting a cost study shall provide comprehensive and complete work papers that fully disclose and document the process underlying the development of each of its economic costs, including the documentation of all judgments and methods used to establish every specific assumption employed in each cost study. The work papers must clearly and logically present all data used in developing each cost estimate, and must be so comprehensive as to allow others initially unfamiliar with the studies to replicate the methodology and calculate equivalent or alternative results using equivalent or alternative assumptions. The work papers must be organized in such manner as to clearly identify and document all source data and assumptions, including investment, expense, and demand data and assumptions.

In addition, for each cost study, the party submitting the cost study was required to provide sensitivity analyses of study outputs to alternative input assumptions regarding the economic depreciation of facilities, the cost of capital, and fill factors and utilization assumptions.

network (common channel signaling - CCS7); (6) call-related databases and service management systems; (7) operations support systems ("OSS") functions; (8) operator functions; (9) directory assistance; (10) physical and virtual collocation; (11) service provider number portability (interim solutions); (12) dark fiber; and (13) access to poles, ducts, conduit, and rights-of-way. (Zarakas, Tr. 371.)

1. Existing Network Configuration v. "Scorched Node"

BellSouth's cost studies assumed the existence of its current wire centers and parts of its infrastructure, based on the premise that new telephone cables will be laid along the same roads and in the same rights-of-way as the current facilities are located. BellSouth then assumed the implementation of new technology, given this existing network configuration. (Caldwell, Tr. 442.) BellSouth modeled the network elements and used inputs from: (1) the Switching Cost Information System ("SCIS") model developed by Bell Communications Research, Inc. ("Bellcore") to establish switching costs; (2) various specialized price calculators; (3) a statistical sample of loops within the state; and (4) subject-matter experts with extensive expertise and knowledge about telecommunications in general and BellSouth's operations in particular. (Caldwell/Zarakas, Tr. 376-410.) The inputs from the various sources were used by BellSouth's "TELRIC Calculator©" to compute the cost of the UNEs.

The Hatfield model championed by AT&T and MCI uses a "scorched node" approach that assumes existing central (end) offices but essentially rebuilds the network using fully forward-looking configurations and assumptions. AT&T/MCI witness Wood argued that the scorched node approach is consistent with a forward-looking, long-run incremental cost methodology because in the long run, the network should be considered avoidable. In particular, AT&T and MCI argued that the structure of and inputs to the Hatfield Model 4.0 are appropriate because they adhere to four essential criteria: costs must be (1) long-run; (2) based on efficient use of least-cost, forward-looking technology currently available; (3) calculated assuming demand for the total quantity of the element being studied; and (4) based on the principle of cost-causation. (Wood, Supplemental/Rebuttal at 11.)

The Georgia Public Communications Association, Inc. ("GPCA") supported the use of the Hatfield Model Release 4.0, and urged rejection of the BellSouth model. The GPCA contended that BellSouth applied a distorted version of the FCC's TELRIC methodology in order to justify higher costs, primarily by allocating historic levels of overhead costs to its TELRIC results. By contrast, GPCA argued, Release 4.0 of the Hatfield Model satisfies the requirements for cost-based pricing in a competitive environment, using forward-looking methodology based on publicly available data. The GPCA added that its methodology creates competitively neutral and nondiscriminatory prices, and ensures that the UNEs are not subsidized by other service offerings or other customers of the incumbent LEC. (GPCA Brief at 1, 3.)

AT&T and MCI argued that the underlying logic of Hatfield Model 4.0 remains straightforward and understandable; that it applies generally-accepted engineering principles to determine the amount of various network components required to meet a specified level and location of demand. The model assumes the location of existing wire centers, but otherwise calculates the least-cost, forward-looking cost of feeder, distribution, and other facilities (the "scorched node" approach). Applying user-adjustable cost data inputs, the model calculates a required level of investment. The level of investment is used to determine capital carrying costs and many operating expenses. It also contains a module that can be used to develop costs for universal service purposes. The net result is forward-looking prices for unbundled network elements intended to reflect the costs that an efficient provider which faces competition would incur to provide telecommunications services in the Georgia market. (AT&T Proposed Order at 11, citing Wood Direct at 29.)

MCI argued that the rates put forward by it and AT&T reflect truly forward-looking economic costs without reference to past Commission proceedings and thus are consistent with the 1996 Act and the FCC rules upheld by the Eighth Circuit, and will facilitate competition in Georgia's local exchange market. By contrast, MCI argued, BellSouth's rates are based on theories and cost models that incorporate embedded costs and rely on rate of return principles, and would continue the inefficiencies which result from monopoly markets. (MCI Reply Brief at 1-2.) MCI explained that the Hatfield Model used inputs that were highly specific to BellSouth's operating territory in Georgia, but were appropriately independent of BellSouth's embedded network and operations. MCI criticized BellSouth's cost studies as beginning with embedded or historical investments and network design, carrying forward the embedded characteristics of the network. MCI noted that BellSouth agreed during the hearings that in a valid long-run study, all costs are avoidable (Tr. 380-384), and argued that the BellSouth studies inappropriately applied a short-run assumption in which many embedded systems and work activity characteristics act as cost constraints. (MCI Brief & Proposed Order at 12.)

MCI also argued that the Hatfield Model is a fully "open" model which permits review and verification. MCI urged the Commission to base its decision on information that is part of the public record. MCI argued that the Hatfield Model's openness directly enhances the credibility of the model. The Hatfield Model has been subject to thorough cross examination in numerous regulatory proceedings; all detailed geographic and demographic data that the model uses can be viewed directly by the user; and it contains over 1,200 user-adjustable inputs that can be changed easily through a user interface. (MCI Brief & Proposed Order at 18, citing Wood, Tr. 1309.) Each of the inputs to the model and the basis for selecting the default values were described in the Hatfield Model Inputs Portfolio, attached to Mr. Wood's Direct Testimony as AT&T/MCI Joint Hearing Exhibit 3. Its results can be reproduced, all inputs and calculations can be directly reviewed by the user, and complete documentation was provided describing the basis for the model inputs. (MCI Brief at 35.)

MCI and several other intervenors criticized BellSouth's cost studies because they rely upon cost models that proprietary, in whole or in part, and thus not open to public scrutiny. This means, among other things, that a person reviewing the model cannot reproduce the results. (Wood testimony, Tr. 1359.) As a result, MCI pointed out, it is impossible to test the BellSouth loop model or to conduct a sensitivity analysis of its primary inputs. (MCI Brief at 33.) BellSouth's methodology also relied upon the Switched Network Calculator ("SNC") and Switching Cost Information System ("SCIS"), which are intertwined so that they relate directly to one another; if one produces wrong results, so will the other. (MCI Brief at 33, citing Tr. 674-75.) These switching models are "closed" even tighter than the loop model, on the basis of protecting vendor proprietary information and the value of the model to BellCore for licensing purposes. The calculations and the important inputs and assumptions are hidden from the user. A proprietary version of BellSouth's SNC model, used to calculate its switching costs, does not allow the user to change key inputs. MCI stated that a similar situation was present in BellSouth's shared and common cost model, that key inputs were locked and could not be changed. (MCI Brief at 33-34.)

BellSouth cited a report by Arthur Anderson & Company to support the accuracy of the switching models it used. BellSouth witness Zarakas of Theodore Barry & Associates testified regarding his firm's review of BellSouth's application of SNC and SCIS in this case. MCI charged, however, that Mr. Zarakas relied heavily on the Arthur Anderson report for his evaluation, and that Arthur Anderson's work did not constitute an "audit." Nor was it a technical engineering review of equipment prices or capabilities. (MCI Brief at 34, citing Tr. 677-79, 681.) BellSouth did not submit the Arthur Anderson report as evidence in the record of this case.

Low Tech Designs, Inc. ("LTD") charged that the BellSouth cost studies failed to meet appropriate requirements because certain assumptions were "deeply embedded" in the cost study and not susceptible to easy modification. Consequently, LTD argued, the parties were not able to analyze adequately BellSouth's Advanced Intelligent Network ("AIN") cost studies. LTD stated that AIN capabilities are critical to differentiation of telecommunications services between carriers, and criticized BellSouth as not offering LTD the ability, via mediation, to interconnect third-party AIN SCPs or Intelligent Peripherals. LTD particularly recommended adoption of the AIN query cost proposed by AT&T witness Wayne Ellison. (LTD Brief at 2-3.)

BellSouth witness Varner criticized the Hatfield Model's scorched node assumption as a "start from scratch" approach that assumes technology never changes, no uncertainty exists, and no firm ever makes an investment without correctly predicting the future. According to Mr. Varner, basing prices on a hypothetical, idealized network would mean that every time a new cost-reducing technology is developed, BellSouth must reduce its price to that level even though its existing network isn't being modified to use it. (Varner Rebuttal at 11.)

BellSouth argued that the Hatfield cost studies bear no relationship to BellSouth's existing network, forward-looking or otherwise. According to BellSouth, because it is a hypothetical network belonging to a hypothetical carrier, the Hatfield Model severely underestimates the costs BellSouth will incur to provide service, no matter how efficiently it operates. BellSouth then questioned whether any savings from artificially low UNE prices would be passed on to the CLECs' customers. BellSouth concluded that setting UNE and interconnection prices below BellSouth's costs of providing service on a "going forward basis" would be unsound as a matter of public policy because it would: (1) provide an unwarranted subsidy to BellSouth's competitors; (2) destroy an incentive for facilities-based competition; and (3) impose unwarranted business risks on BellSouth without offering any corresponding compensation. According to BellSouth, all of these factors weigh in favor of setting rates for UNEs and interconnection that fairly compensate BellSouth for the reasonable costs it will actually incur in providing service to CLECs, and this is consistent with the Commission's duty to ensure just and reasonable rates. (BellSouth Brief at 4-6, 23-26.) BellSouth also argued that Section 252(d)(1)(A)(ii) prohibits certain ratemaking methods, *i.e.*, traditional rate-of-return or rate base proceedings, but that it does not prohibit consideration of a company's actual or embedded costs. (BellSouth Brief at 9-11.)

BellSouth submitted various criticisms of the Hatfield Model relating to its data inputs, assumptions, methodological approach, differing versions, and results. (BellSouth Brief at 14-17.) BellSouth also criticized the intervenors' cost studies to the extent that they are premised upon BellSouth providing loop-port combinations that should be recognized as resale. (BellSouth Brief at 17-21.) BellSouth further repeated its criticism that the Hatfield Model determines the cost of UNEs and interconnection with little regard to the real-world experience of an efficient provider in the local exchange market. As BellSouth put it, the Hatfield Model's hypothetical provider comes into existence in a "snapshot" fashion with little history, and is assumed to be able to serve the entire current volume of demand for a network element even though no separate market for it exists today. With this level of demand, the Hatfield Model attempts to construct a network that recognizes current wire center locations but builds essentially every other aspect of the network from scratch, in one fell swoop. (BellSouth Brief at 21.)

MFS Communications Company, Inc. and WorldCom, Inc. (collectively "WorldCom") urged the Commission to reject BellSouth's loop cost study, and instead price loops with the same cost model that the Commission will use to establish Georgia's eligibility for federal universal service support, under rules of the FCC. (WorldCom Brief at 1, 2-5.) WorldCom premised its position on asserted inadequacies of BellSouth's study and the need to deal with loop costs, among other costs, in upcoming universal service proceedings. WorldCom stated that embedded costs which were incurred piecemeal do not recognize the kind of volume discount to which BellSouth would be entitled if it were reconstructing its network with a "scorched node" approach, which it asserted TELRIC requires; and added that BellSouth's embedded cable costs in the study and in the proposed RRR charge were based on purchasing much smaller size cable, for piecemeal installation, than BellSouth would buy when reconstructing its network. Finally, WorldCom stated that BellSouth's embedded costs do not reflect modern network design principles that tend to emphasize cost-saving techniques. (WorldCom Brief at 5, 7-10.)

The Staff recommended the adoption of BellSouth's approach of using the existing network configuration and making adjustments to reflect the costs of forward-looking technology. This approach recognizes BellSouth's existing network configuration, while recalculating the associated costs in order to reflect forward-looking costs. While the Staff recommended other adjustments to BellSouth's cost studies, the Staff agreed with BellSouth regarding this major assumption of the cost model methodology. The Staff also noted that the Hatfield model assumes the ability of CLECs to recombine unbundled network elements in a manner that contradicts the Commission's previously decided policy, although the primary basis for the Staff's recommendation was that it is more reasonable to accept BellSouth's existing network configuration than to rebuild the network essentially overnight. The populations to be served grew over time as did BellSouth's network. Thus the Staff accepted the existing configuration, but repriced its costs in order to be forward-looking.[8]

Discussion

The Commission finds and concludes that the Staff's recommendation is reasonable. This will result in use of BellSouth's existing network configuration, while repricing its costs in order to be forward-looking. The Hatfield Model, by contrast with BellSouth's approach, ignores that BellSouth's network typically grows in discrete increments to meet demand growth as it materializes. The Commission is sensitive to the need for open models subject to public scrutiny, and does not intend to endorse the proprietary nature of BellSouth's models. The Commission adopts the Staff's recommendation because it is a reasonable approach that will result in reasonable rates.

The Commission does not reach any decision regarding whether BellSouth's assertions regarding proprietary aspects of the models are based upon valid trade secret claims as defined in O.C.G.A. § 10-1-76(4) and thus protectable from public disclosure under the Georgia Open Records Act, O.C.G.A. §§ 50-18-70 et seq., and the Commission's Rule 515-3-1-.11. The Commission has previously expressed concern (*e.g.*, Order Ruling on Arbitration at 12, November 8, 1996, Docket No. 6759-U) that cost models used as evidence for Commission decisions should be as open as possible. When a particular scientific procedure or technique is challenged, the decision-making body makes a determination whether the procedure or technique in question has reached a scientific stage of verifiable certainty, based upon evidence, expert testimony, treatises, or the rationale of cases in other jurisdictions. Orkin Exterminating Co. v. McIntosh, 215 Ga. App. 587, 452 S.E.2d 159 (1994).[9] At the same time, the Commission is not bound by the strict rules of evidence, and may exercise such discretion as will facilitate its efforts to ascertain the facts bearing upon the right and justice of the matters before it. O.C.G.A. § 46-2-51. Although BellSouth's models are not fully open, BellSouth has afforded more discovery and review of various aspects of them than it previously afforded to other parties. At the same time, it remains evident that openness and availability for public scrutiny can only benefit the process of reviewing cost models and determining costs. In this case, the issue of openness of the models is not dispositive and instead, the Commission adopts its approach on the basis of the fundamental theoretical difference between "scorched node" and BellSouth's assumption of the existing network configuration.

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[8] BellSouth also repriced its network to develop forward-looking costs, but as discussed later, the Staff made additional adjustments to develop the most appropriate cost factors which this Commission has adopted.

[9] *See also* Hubbard v. State, 207 Ga. App. 703, 429 S.E.2d 123 (1993); and "Exiting the Twilight Zone: Changes in the Standard for Admissibility of Scientific Evidence in Georgia," 10 Ga. St. U. L. Rev. 401 (1994).

The Commission does not endorse BellSouth's citation of traditional rate-of-return analysis in support of the BellSouth cost methodology approach. *See, e.g., Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1949); *Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-693 (1923). While these cases may provide useful insight into the cost of capital to be applied for cost-based rates, as discussed later in this order, they involved traditional rate-of-return or rate base regulation that has been explicitly superseded pursuant to Section 252(d). While overarching constitutional principles remain in place to prohibit confiscation, the traditional rate-of-return analysis must yield to an approach consistent with a competitive environment. Moreover, BellSouth has explicitly elected alternative regulation under the Georgia Act, O.C.G.A. § 46-5-161 *et seq.*, in lieu of traditional regulation.

The Commission concludes that Section 252(d) does not preclude consideration of BellSouth's existing network configuration. Section 252(d) does not prohibit consideration of BellSouth's actual costs, and it also does not prohibit repricing the network in order to reflect forward-looking costs. Indeed, since Section 252(d)(1)(A)(ii) proscribes traditional rate-of-return or rate base methodologies, it certainly supports moving away from traditional recovery of all embedded costs. The fundamental BellSouth approach of determining the actual costs on a going-forward basis is reasonable under both Section 252(d) and under the Georgia Act, O.C.G.A. §§ 46-5-161 *et seq.*, 46-5-165. While the Hatfield approach urged by AT&T, MCI, and other intervenors may be sustainable under these statutory provisions, the Commission finds and concludes that the Staff approach of using the BellSouth methodology with further improvements in the cost adjustments is the most appropriate in this proceeding, will meet the statutory requirements, and will result in just, reasonable, and nondiscriminatory rates. In this sense, and given that the choice of inputs has more impact on the results than the choice of the model, the Commission concludes that the end result of cost-based rates is ultimately more important than strict adherence to a particular methodology.

2. BellSouth's Proposed "Residual Recovery Requirement"

BellSouth proposed a "Residual Recovery Requirement" ("RRR") factor as a surcharge to its TELRIC calculated costs for loops and local switching. The purpose of this RRR factor is to recover BellSouth's embedded costs, by adding the surcharge for the difference between forward-looking and embedded costs. BellSouth witness Caldwell described the RRR as a cost additive to reflect the differences between the "theoretical cost" and the "actual cost" of the unbundled network element (UNE). (Caldwell Direct (Panel) at 42.)

BellSouth contended that pricing that is completely forward-looking will not provide BellSouth with a reasonable opportunity to recover its investment in the plant and equipment currently in place and that will be used to provide service to customers. Thus BellSouth characterized the RRR as "the difference between what BellSouth would recover under a pure TELRIC price of a loop and port and the amount necessary to allow BellSouth to recover all of its embedded investment in the loop and port." (BellSouth Brief at 34.) BellSouth argued that nothing in the 1996 Act prohibits the consideration or recovery of "embedded," "sunk," "stranded" or "actual" costs. (*Id.*)

Indeed, BellSouth argued that not allowing the RRR would be a confiscation of BellSouth's property contrary to the Amendments V and XIV of the U.S. Constitution and Article I, Section 3, Paragraph 1 of the Georgia Constitution; citing also *FCC v. Florida Power Corp.*, 480 U.S. 245, 253, 107 S.Ct. 1107, 94 L.Ed.2d 282 (1987); *Provident Mutual Life Ins. Co. v. City of Atlanta*, 864 F. Supp. 1274, 1282 (N.D. Ga. 1994).

The Consumers' Utility Counsel pointed out that BellSouth approaches this docket from a seller's perspective, and begs the question: How would a CLEC building its own forward-looking network incur any historical costs? In addition, BellSouth's historical costs, when added to the TELRIC of UNEs, are such that competition in local exchange service would be unlikely if the total prices thus proposed were adopted. It does not follow, contended the CUC, from a policy perspective that CLECs should pay for BellSouth's historical costs. (CUC Brief at 10.) The CUC has always supported the concept of long-run incremental cost ("LRIC") and was an early supporter of total services long-run incremental cost ("TSLRIC"), upon which the FCC relied in developing the concept of TELRIC. Accordingly, the CUC cannot and does not support the RRR urged by BellSouth, or any embedded cost characteristics that BellSouth's models may contain. (CUC Brief at 10-11.)

AT&T witness Ellison criticized BellSouth's RRR proposal, pointing out that in the past and in other proceedings BellSouth has advocated the use of long-run incremental costs ("LRIC") instead of embedded costs to define both the price at which BellSouth is fully compensated and the cost that BellSouth believes should be the basis for interconnection prices. BellSouth has argued before state regulators for the ability to establish various service prices, particularly prices for competitive services, at or below incremental costs. For example, BellSouth sponsored a witness (Frank Kolb) before the Georgia Public Service Commission in Docket No. 5258-U who supported the use of long run incremental cost as the proper standard in computing a price floor and testing for a subsidy. Mr Kolb further testified in that proceeding that fully distributed costs are inappropriate for competitive pricing and do not reflect the true economic costs associated with the decision to provide a service, because they do not reflect the current or prospective value of the capital investment used to provide the service, and are misleading because ongoing costs (maintenance, administration and other operating expenses) are not fixed at their past levels, nor are the methods of production unchanging. BellSouth also supported the use of LRIC for interconnection pricing in a March 1995 filing with the European Commission. Mr. Ellison also criticized BellSouth's RRR proposal as being anti-competitive, and testified that inflating the rates charged to new entrants would assure BellSouth of retaining its monopoly hold on a large proportion of Georgia consumers for years to come. (Ellison Supplemental-Rebuttal at 42-46.)

AT&T and MCI also sponsored witness Wood who explained that BellSouth's proposed Residual Recovery Requirement is a purely embedded cost component. (Wood Supplemental-Rebuttal at 35.) According to Mr. Wood, the RRR has three meanings in this proceeding: one conceptual, one practical, and one strategic. If BellSouth's TELRIC figures represent forward-looking economic costs (which Mr. Wood disputed), the RRR would quantify the amount by which

BellSouth's current costs exceed the costs that would be incurred by an efficient carrier serving the same geographic area. The practical meaning of the RRR is that it automatically ensures that all of BellSouth's historic costs are recovered (*i.e.* ensures that BellSouth is "made whole," even though it is no longer subject to traditional rate-of-return regulation in the traditional monopoly environment), and renders moot all of the loop and switch port cost studies that BellSouth presented. For example, BellSouth's proposed rate including the RRR was $25.28; and if the TELRIC portion of this were adjusted downward by $2.00, the RRR would automatically increase by $2.00 to compensate, so BellSouth's proposed rate would remain $25.28. (Wood Supplemental-Rebuttal at 36-40.)

Not least significant, Mr. Wood explained that the strategic aspect of the RRR is its proposed application only to the local loop and port elements (*see* BellSouth witness Caldwell Direct at 42). As Mr. Wood testified, this would make the RRR a tool for developing discriminatory rates in violation of Section 252(d)(1) of the 1996 Act. While BellSouth witness Ms. Caldwell stated that the loop and switching port elements comprise only 70 percent of the costs used to develop the RRR and the remaining 30 percent was created by other network elements, no part of the RRR was applied to such other network elements. Mr. Wood concluded that allowing the RRR would therefore have the additional unfortunate impact of providing BellSouth with additional monopoly power to extract unduly high prices for the essential loop and switch port elements from its competitors. (Wood Supplemental-Rebuttal at 41-42.)

AT&T/MCI witness Dr. Cabe testified regarding the basic economic underpinnings to the pricing standards of the Act. He stated that the requirement that the prices be "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding)" should be interpreted to mean that prices should recover efficient economic costs, and nothing more. MCI argued that to do otherwise would create a barrier to entry in Georgia for companies who would compete in the local exchange markets, and that Dr. Cabe's testimony on this point was unrebutted. (MCI Brief & Proposed Order at 9, citing Cabe, Tr. 1581.)

The GPCA argued that historical costs should not be included in the rates for UNEs, and that the objective of any methodology should be to determine the rate at which BellSouth will be compensated for the costs that would be incurred by an efficient provider. The GPCA urged that the goal of this docket should not be to make BellSouth "whole," "whatever that may mean." (GPCA Brief at 2.) The GPCA stated that rates may be sufficient to recover direct costs, but may not allow recovery of more than an appropriate level of overhead costs or include historical pricing methodologies. The GPCA concluded that BellSouth's cost study did not satisfy the appropriate cost criteria, and that BellSouth should be allowed to recover TELRIC costs and nothing more. (GPCA Brief at 2.)

WorldCom also criticized the proposed RRR, stating that BellSouth should not recover embedded costs because they do not recognize the generally declining costs of technology that lead to lower costs of fiber optic cable and loop electronics, or forward-looking productivity. WorldCom